

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): In an endoscopic catheter for passing through the working channel of an endoscope, said endoscope catheter having a distally located tissue cutting device in a lumen thereof comprising an exposed linear cutting member, the improvement for determining the amount of cutting member deployed for cutting which comprises:

providing said cutting member with a plurality of radiopaque indicia located at radiologically measurable intervals.

Claim 2 (original): Catheter of claim 1 wherein said catheter has:
a radiopaque reference point to determine the length of the deployed cutting member by reference to said indicia.

Claim 3 (original): Catheter of claim 2 wherein the cutting member is a needle knife and said radiopaque reference point is at the distal end of said catheter.

Claim 4 (cancelled)

Claim 5 (original): Catheter of claim 1 wherein said radiopaque indicia are referenced from a middle of said cutting member and alternate along a length of said cutting member as a function of the distance from said middle thereof.

Claim 6 (currently amended): In an endoscopic catheter for passing through the working channel of an endoscope, said endoscopic catheter having a distally located tissue cutting device in a lumen thereof comprising an exposed linear cutting member, the improvement for determining the amount of cutting member deployed for cutting which comprises:

providing said cutting member with a plurality of radiopaque indicia located at

radiologically measurable intervals; and

a radiopaque reference point to determine the length of the deployed cutting member by reference to said indicia.

Claim 7 (original): Catheter of claim 6 wherein the cutting member is a needle knife and said radiopaque reference point is at the distal end of said catheter.

Claim 8 (cancelled)

3 | Claim 9 (original): Catheter of claim 6 wherein said radiopaque indicia are referenced from a middle of said cutting member and alternate along a length of said cutting member as a function of the distance from said middle thereof.

Claim 10 (currently amended): In an endoscopic catheter for passing through the working channel of an endoscope, said endoscopic catheter having a cable actuated needle knife in a lumen thereof, said needle knife being deployable from a distal end of said catheter, the improvement for substantially preventing movement of said needle knife after deployment which comprises one or more spaced apart detents along said cutting member which interact with one or more notches in the distal end of said lumen thereby providing resistance to movement.

Claim 11 (original): Catheter of claim 10 wherein said detents are evenly spaced along a length of the cutting member.

Claim 12 (currently amended): In an endoscopic catheter for passing through the working channel of an endoscope, said endoscopic catheter having a distally located tissue cutting device in a lumen thereof comprising an exposed linear cutting member, the improvement for determining the amount of cutting member deployed for cutting and for substantially preventing movement of said cutting member which comprises:

providing said cutting member with a plurality of radiopaque indicia located at.

radiologically measurable intervals and one or more spaced apart detents to interact with one or more notches in the distal end of said lumen thereby providing resistance to said movement.

Claim 13 (previously presented): Catheter of claim 12 wherein said catheter includes a radiopaque reference point to determine the length of the deployed cutting member by reference of said indicia.

Claim 14 (original): Catheter of claim 13 wherein the cutting member is a needle knife and said radiopaque reference point is at the distal end of said catheter.

Claim 15 (cancelled)

Claim 16 (original): Catheter of claim 12 wherein said radiopaque indicia are referenced from a middle of said cutting member and alternate along a length of said cutting member as a function of the distance from said middle thereof.

Claim 17 (currently amended): In an endoscopic catheter for passing through the working channel of an endoscope, said endoscopic catheter having a distally located tissue cutting device in a lumen thereof comprising an exposed linear cutting member, the improvement for determining the amount of cutting member deployed for cutting and for substantially preventing movement of said cutting member which comprises:

providing said cutting member with a plurality of radiopaque indicia located at radiologically measurable intervals and one or more spaced apart detents to interact with one or more notches in the distal end of said lumen thereby providing resistance to said movement; and

a radiopaque reference point to determine the length of the deployed cutting member by reference of said indicia.

Claim 18 (original): Catheter of claim 17 wherein the cutting member is a needle knife and said radiopaque reference point is at the distal end of said catheter.

Claim 19 (cancelled)

Claim 20 (original): Catheter of claim 17 wherein said radiopaque indicia are referenced from a middle of said cutting member and alternate along a length of said cutting member as a function of the distance from said middle thereof.

Claim 21 (currently amended): In an endoscopic catheter for passing through the working channel of an endoscopic catheter, said endoscopic catheter having a distally located tissue cutting device in a lumen thereof comprising an exposed linear cutting member, the improvement for determining the amount of cutting member deployed for cutting which comprises:

providing said cutting member with a plurality of visual indicia located at visually measurable intervals.

Claim 22 (original): Catheter of claim 21 wherein said catheter has:
a visual reference point to determine the length of the deployed cutting member by reference to said indicia.

Claim 23 (original): Catheter of claim 22 wherein the cutting member is a needle knife and said visual reference point is at the distal end of said catheter.

Claim 24 (cancelled)

Claim 25 (original): Catheter of claim 21 wherein said visual indicia are referenced from a middle of said cutting member and alternate along a length of said cutting member as a function of the distance from said middle thereof.

Claim 26 (original): Catheter of claim 21 wherein said visual indicia include different color markings.

Claim 27 (currently amended): Method for exposing a tissue cutting device located in a distal portion of a lumen of an endoscope catheter for passing through the working channel of an endoscope which comprises:

providing said cutting member with a plurality of radiopaque indicia located at radiologically measurable intervals along a length of said cutting member;
deploying said cutting member; and
radiologically determining the length of said cutting member deployed.

Claim 28 (previously presented): Method of claim 27 wherein said step of radiologically determining said length uses a radiopaque reference point.

Claim 29 (previously presented) Method of claim 28 wherein said cutting member is a needle knife and said radiopaque reference point is at the distal end of said catheter.

Claim 30 (cancelled)

Claim 31 (currently amended): Method for exposing a tissue cutting device located in a distal portion of a lumen of an endoscope catheter for passing through the working channel of an endoscope which comprises:

providing said cutting member with a plurality of radiopaque indicia located at radiologically measurable intervals along a length of said cutting member and a radiopaque reference point;
deploying said cutting member; and
radiologically determining the length of said cutting member which is exposed.

Claim 32 (previously presented): Method of claim 31 wherein said cutting member is a needle knife and said radiopaque reference point is at the distal end of said catheter.

Claim 33 (cancelled)

Claim 34 (currently amended): Method for preventing movement of an exposed portion of a deployed cutting knife located in a distal portion of a lumen of an endoscopic catheter for passing through the working channel of an endoscope which comprises:

31 providing said cutting member with a plurality of detents located at spaced intervals;

providing the distal end of said catheter with a corresponding notch; and
engaging said notch and a detent upon deployment of said knife at a desired length to prevent movement of said deployed cutting knife.
